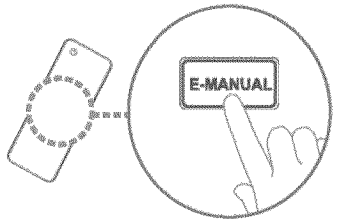
SAMSUNG

E-MANUAL



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Model _____ Serial No. _____

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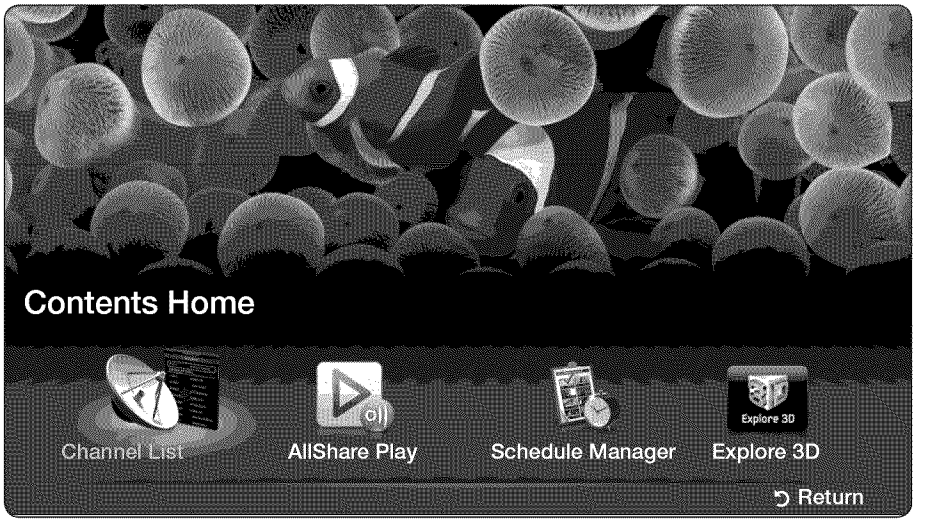
❑ Using the Channel menu

Press the **CONTENT** button, and then select the desired menu item. Choose from **Channel List** and **Schedule Manager**.

■ Channel List

MENU → **Support** → **Contents Home** → **Channel List** → **ENTER**

The **Channel List** contains the channels your TV displays (added channels) when you press the **CH LIST** button. On the **Channel List**, you can view channel information, **Added Ch.**, **Favorites 1-5** and manage channels.



- **Added Ch.**: Shows all added channels.
- **Favorites 1-5**: Shows all favorite channels, arranged in up to five groups. Each group has a separate screen.

  The TV displays **Favorites 1-5** only if you have added favorites using **Edit Favorites**.

  If you want to view the list of favorite channels quickly, press the **CH LIST** button, and then press the ► (**CH Mode**) to display **Favorites 1-5**. If you have favorites in more than one favorite group, press the ► (**CH Mode**) to view the other groups. Press the ◄ (**CH Mode**) to return to the **Added Ch.**.

Using the function buttons with the **Channel List**.

- (**Tools**): Displays the option menu.
- (**CH Mode** / **Channel**): Moves to the **Favorites** list (if you have added favorites using **Edit Favorites**) / Moves to other channels when you select the **Program View** in (**Tools**) menu.
- (**Watch** / **Information**): Press to watch the channel you selected. / Displays details of the selected program.
- (**Page**): Scrolls the **Channel List** to the next or previous page.

How to use Schedule Viewing in Channel List (digital channels only)

You can use **Schedule Viewing** in **Channel List** to schedule a digital channel program for viewing. The TV will turn on and display the digital channel program when the program begins.

To schedule a digital program, follow these steps:

1. Press the **CH LIST** button, then select a desired digital channel.
2. Press **TOOLS** button, and then select the **Program View**. The program list for that channel appears.
3. Press the ▲/▼ buttons to select the desired program, and then press the **ENTER** (**Information**) button.
4. Select **Schedule Viewing**, and then press the **ENTER** button.

If you want to cancel **Schedule Viewing**, follow Steps 1 through 3, and then select **Cancel Schedule**.

Using Option Menu TOOLS

Manage channels using the **Channel List** menu options (**Program View, Edit Favorites, Channel Name Edit, Delete, Information, Change Antenna, Edit Mode**).

1. Use the arrow buttons to select a channel, and then press the **TOOLS** button.
2. Select an option, and then press **ENTER** to activate the option or change its settings.

- **Program View** (digital channels only): Displays the program when digital channel is selected.

- **Edit Favorites** TOOLS: Set channels you watch frequently as favorites. Add or delete the selected channel in **Favorites 1-5**.

  1. Select **Edit Favorites**, and then press the **ENTER** button. The **Edit Favorites** screen appears.
  2. The **Edit Favorites** screen has five groups, **Favorites 1**, **Favorites 2**, etc. You can add a favorite channel to any one of the groups. Select a group using the ▲/▼ buttons, and then press **ENTER**.
  3. Select **OK**, and then press **ENTER** twice.

  If you want to edit or delete the channel as being **Favorites**, change its settings in **Edit Favorites** screen.

- **Channel Name Edit** (analog channels only): Assign a name of up to five characters to a channel. For example, Food, Golf, etc. This makes it easier to find and select the channel.
- **Delete**: Delete a channel from the channel list. When you use the channel button to change channels, your TV only displays the channels on the channel list.
- **Information**: Displays details of the selected program.

  Press the **Watch** to switch the channel directly.
- **Change Antenna**: Switches to **Air** or **Cable**.
- **Edit Mode**: You can select desired channels and edit it. For detailed information about using **Edit Mode**, refer to “Using Option Menu in Edit Mode”.

Using Option Menu in Edit Mode TOOLS

Press the ◄ / ► button to select the channel mode (**Added Ch.** / **All Channels** / **Favorites 1-5**).

- **Added Ch.**: Shows all added channels.
- **All Channels**: Shows all currently available channels.
- **Favorites 1-5**: Shows all favorite channels. The TV displays **Favorites 1-5** only if you have added favorites using **Edit Favorites**.

Set each channel using the menu options (**Edit Favorites**, **Add / Delete**, **Information**, **Deselect**, **Select All**). The option menu items that appear may differ depending on the channel status and type.

1. Press the **TOOLS** button in **Channel List** screen, then select the **Edit Mode**. A check box appears to the left of the channel.
2. Press the ▲/▼ buttons to select the desired channel, and then press **ENTER** button. The (✓) mark indicates the channel you've selected.

   You can select more than one channel.

   Press **ENTER** button again to deselect the channel.
3. Press the **TOOLS** button, then select a function and change its settings.

- **Edit Favorites**: Set the selected channels you watch frequently as favorites.

  The **Edit Favorites** screen has five groups (**Favorites 1**, **Favorites 2**, etc.). You can add a favorite channel to any one of the groups. Press the ▲/▼ buttons to select a group.

- **Add / Delete**: Delete or add a channel to display the channels you want.

  The **Add** menu is only available in **All Channels**.

  The **Add** menu only appears for deleted channels.

  A gray-colored channel indicates the channel has been deleted.

- **Information**: Displays details of the selected program.

  Press the **Watch** to switch the channel directly.

- **Deselect**: Deselect the selected channels.
- **Select All**: Select all the channels in the channel list.

Schedule Manager

MENU → Support → Contents Home → Schedule Manager → ENTER

Select the schedule menu item to access the **Schedule Viewing** function. **Schedule Viewing** lets you display the channel you want at the time of your choice.

Using Option Menu TOOLS

You can set the TV to display a desired channel automatically on a day and at a time of your choice. Set each channel using the menu options (**Cancel Schedule**, **Edit Schedule**, **Manually Schedule**)

You must set the current time first using the **Time** → **Clock** function in the **System** menu to use this function.

To use **Schedule Viewing**, follow these steps:

1. Press the **TOOLS** button on the **Schedule Manager** screen. Press the **Manually Schedule** to add a scheduled viewing.

   You can press the A (**Manually Schedule**) directly on the **Schedule Manager** screen.

2. Press the ◄/►/▲/▼ buttons to set **Antenna, Channel, Repeat, Date,** and **Start Time**.

   - **Antenna**: Select the desired broadcasting signal.
   - **Channel**: Select the desired channel.

- **Repeat**: Select **Once**, **Manual**, **Sat~Sun**, **Mon~Fri** or **Everyday**. If you select **Manual**, you can set the day you want.

  A check (✓) mark indicates a day you selected.

- **Date**: You can set a desired date.

  Date is available only when you select **Once** in **Repeat**.

- **Start Time**: You can set the start time you want.

If you want to edit or cancel a scheduled viewing, select the scheduled viewing on the **Booking List**. Press the **TOOLS** button and select **Edit Schedule** or **Cancel Schedule**.

❑ Memorizing channels

MENU → Channel → ENTER

Your TV memorizes channels and adds the memorized channels to the **Channel List** with the **Auto Program** function. Before your TV can memorize channels, you must specify the signal source, either **Air** or **Cable**. If you select cable, when you start **Auto Program**, you must also specify the cable system type, **STD**, **HRC**, or **IRC**. If you don't know your cable system type, contact your local cable company for the information. Most cable companies use **STD**.

Antenna (Air / Cable) TOOLS

To begin the memorizing procedure, follow these steps:

1. Push **MENU** → Channel → **ENTER**.
2. Select Antenna, and then press **ENTER**.
3. Select the source of your TV signal, Air or Cable. Go to the next section, Auto Program.

Selecting Air or Cable also changes the actual signal input from Air to Cable or Cable to Air.

Auto Program

Scans for channels automatically and stores them in the TV's memory.

To start **Auto Program**, follow these steps:

1. Push **MENU** → **Channel** → **ENTER**.
2. Select **Auto Program**, and then press **ENTER**.
3. Select **Start**, and then press **ENTER**.
4. Select **Air** or **Cable** or both by highlighting and then pressing **ENTER**.

   If you selected **Air** or **Cable** or both on the **Antenna** screen, your choice will already be selected.

5. Select **Next**, and then press **ENTER**.
6. If you selected **Cable**, the cable system screen appears. Select **Digital Cable System**, and then press **ENTER**.

   If you selected **Air** only, **Auto Program** starts.

7. Select **STD**, **HRC**, or **IRC**, and then press **ENTER**↵.
8. Repeat for **Analog Cable System**.
9. Select **Next**, and then press **ENTER**↵. **Auto Program** starts.

After all the available channels are stored, **Auto Program** removes scrambled channels. When done, the **Auto Program** menu then reappears. This process can take up to 30 minutes.

How to Stop Auto Programming

1. Press the **ENTER**↵ button to select **Stop**.
2. A message will ask **Stop Auto Program?** Select **Yes** by pressing the ▲ or ▼ button.
3. Press the **ENTER**↵ button.

❑ Other Features

MENU → Channel → ENTER

■ Clear Scrambled Channel

This function filters out scrambled channels after **Auto Program** is completed. This process may take up to 20~30 minutes.

How to Stop the Clear Scrambled Channels Function

1. Press the **ENTER** button to select **Stop**.
2. Press the ▲ button to select **Yes**.
3. Press the **ENTER** button.

This function is only available in **Cable** mode.

Fine Tune

(analog channels only)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, fine tune the channel manually.

- Select **Fine Tune** in the **Channel** menu.

Fine tuned channels that have been saved are marked with an asterisk "*" on the right-hand side of the channel number in the channel banner.

To reset the fine-tuning, select **Reset**.

❑ Changing the Preset Picture Mode

■ Picture Mode TOOLS

MENU → Picture → Picture Mode → ENTER

Picture modes apply preset adjustments to the picture. Select a mode using the ▲/▼ buttons, and then press ENTER.

When connecting a PC, you can only select Entertain and Standard.

- Dynamic: Suitable for a bright room.
- Standard: Suitable for a normal environment.
- Natural: Suitable for an eye comfortable display.
- Movie: Suitable for watching movies in a dark room.
- Entertain: Suitable for watching movies and games.

  It is only available when connecting a PC.

❑ Adjusting Picture Settings

■ Backlight / Contrast / Brightness / Sharpness / Color / Tint (G/R)

MENU → Picture → Backlight → ENTER

Your television has several options for adjusting picture quality. Select an option using the ▲/▼/◀/▶ buttons, and then press ENTER.

NOTE

- When you make changes to Backlight, Contrast, Brightness, Sharpness, Color or Tint (G/R), the OSD will be adjusted accordingly.
- When connecting a PC, you can only make changes to Backlight, Contrast, Brightness, and Sharpness.
- You can adjust and store settings for each external device connected to the TV.
- Lowering picture brightness reduces power consumption.

Screen Adjustment

MENU → Picture → Screen Adjustment → ENTER

Screen Adjustment provides various picture size and aspect ratio options. Select an option using the ▲/▼/◄/► buttons, and then press ENTER.

- Picture Size: If you have a cable box or satellite receiver, it may have its own set of screen sizes as well. However, we highly recommend you use your TV's 16:9 mode most of the time.

  16:9: Sets the picture to 16:9 wide screen mode.

  Zoom1: Magnifies the picture moderately. Cuts off the top and sides.

  Zoom2: Magnifies the picture more than Zoom1.

  Wide Fit: Enlarges the aspect ratio of the picture so it fits the entire screen.

4:3: Sets the picture to **4:3** mode. For analog TV programs.

Do not set your TV to **4:3** format for a long time. The borders displayed on the left and right, or top and bottom of the screen may cause image retention (screen burn) which is not covered by the warranty.

Screen Fit: When your TV inputs HDMI (720p / 1080i / 1080p) or Component (1080i / 1080p) signals, displays the full image without any cut-off.

Smart View 1: Reduces original screen by 50%.

Smart View 2: Reduces original screen by 25%.

NOTE

- **Smart View 1** is enabled only in HDMI mode.
- **Smart View 2** is enabled only in DTV and HDMI modes.

- **Position**: Adjusts the picture position. **Position** is only available if **Picture size** is set to **Zoom1**, **Zoom2**, **Wide Fit**, or **Screen fit**.

  To use the **Position** function after selecting **Zoom1**, **Zoom2** or **Wide Fit**, follow these steps:

  1. Select the **Position**, and then press the **ENTER** button.
  2. Select the **Position** button, and then press **ENTER**.
  3. Press the ▲ or ▼ button to move the picture up or down.
  4. Press the **ENTER** button.

  If you want to reset the pictures to its original position, select **Reset** in the **Position** screen, and then press **ENTER**. The picture will be reset to its default position.

To use the **Position** function after selecting **Screen Fit** when connected to an HDMI (1080i/1080p) or Component (1080i/1080p) source, follow these steps:

1. Select the **Position**, and then press the **ENTER** button.
2. Select the **Position** button, and then press **ENTER**.
3. Press the ▲, ▼, ◄ or ► button to move the picture.
4. Press the **ENTER** button.

If you want to reset the pictures to its original position, select **Reset** in the **Position** screen, and then press **ENTER**. The picture will be reset to its default position.

- The picture size can vary depending on the input resolution when you play content using **Videos** in **AllShare Play**.
- HD (High Definition): 16:9 - 1080i/1080p (1920x1080), 720p (1280x720)
- You can adjust and store settings for each external device you have connected to an input on the TV.
- Picture Sizes available by Input Source:

Input Source	Picture Size
DTV (1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit, Smart View 2
DTV (720p)	16:9, Wide Fit, 4:3, Smart View 2
DTV (480i, 480p)	16:9, Zoom1, Zoom2, 4:3, Smart View 2
ATV, AV	16:9, Zoom1, Zoom2, 4:3
Component (1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit
Component (720p)	16:9, Wide Fit, 4:3
Component (480i, 480p)	16:9, Zoom1, Zoom2, 4:3
HDMI (720p, 1080i, 1080p)	16:9, Wide Fit, 4:3, Screen Fit, Smart View 1, Smart View 2

❑ Changing the Picture Options

■ Advanced Settings

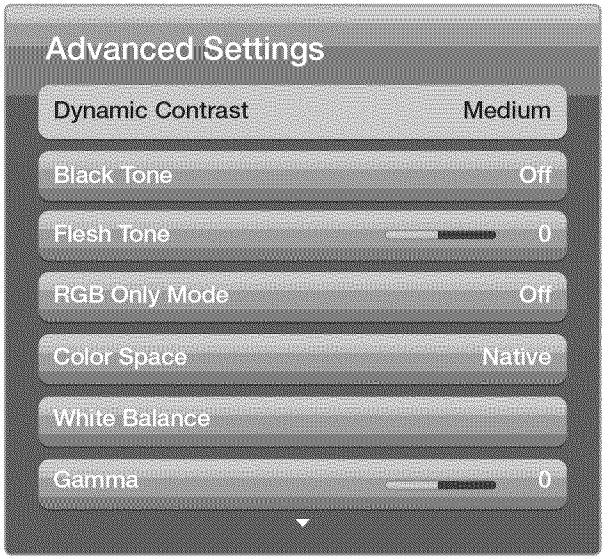
MENU → Picture → Advanced Settings → ENTER

Advanced Settings are available in the Standard and Movie modes.

To use, select an option using the ▲/▼/◀/▶ buttons, and then press ENTER.

When connecting a PC, you can only make changes to White Balance and Gamma.

- **Dynamic Contrast (Off / Low / Medium / High)**: Adjusts the screen contrast.
- **Black Tone (Off / Dark / Darker / Darkest)**: Select the black level to adjust the screen depth.
- **Flesh Tone**: Emphasizes pink “Flesh Tone.”
- **RGB Only Mode (Off / Red / Green / Blue)**: Displays the **Red**, **Green** and **Blue** color for making fine adjustments to hue and saturation.



- **Color Space (Auto / Native)**: Adjusts the range of colors (the color gamut) available to create images.

- **White Balance**: Adjusts the color temperature for a more natural picture.

  R-Offset / G-Offset / B-Offset: Adjusts each color's (red, green, blue) darkness.

  R-Gain / G-Gain / B-Gain: Adjusts each color's (red, green, blue) brightness.

  Reset: Resets the White Balance to its default settings.

- **Gamma**: Adjusts the primary color intensity.
- **Motion Lighting (Off / On)**: Reduces power consumption by reducing screen brightness when the picture on the screen is motionless.

  This function is not supported in **3D** mode.

  When you change the **Backlight**, **Contrast**, or **Brightness**, the TV sets **Motion Lighting** to **Off**.

  Only available in **Standard** mode.

Picture Options

MENU → Picture → Picture Options → ENTER

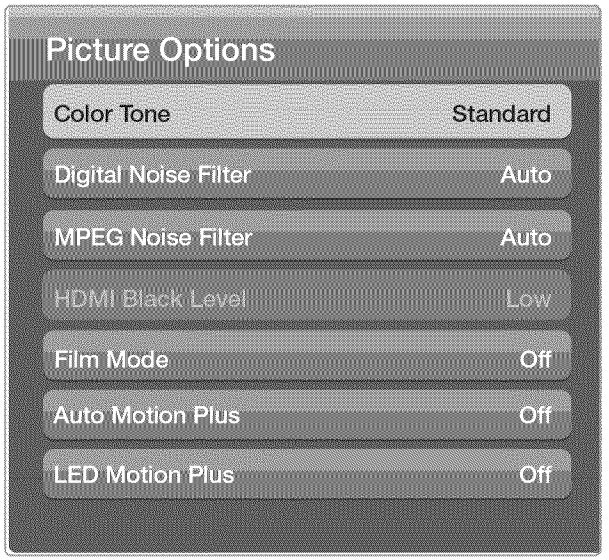
Select an option using the ▲/▼/◀/▶ buttons, and then press ENTER.

When connecting a PC, you can only make changes to Color Tone.

- Color Tone (Cool / Standard / Warm1 / Warm2)

  Warm1 or Warm2 will be deactivated when the picture mode is Dynamic.

  You can adjust and store settings for each external device connected to an input on the TV.



* It may differ depending on the model.

- **Digital Noise Filter (Off / Low / Medium / High / Auto / Auto Visualization)**: If the broadcast signal received by your TV is weak, you can activate the **Digital Noise Filter** feature to reduce any static and ghosting that may appear on the screen.

  When the signal is weak, try each option until the TV displays best picture.

  Auto Visualization: When changing analog channels, displays signal strength.

  Only available for analog channels.

  When the **INFO** button is pressed, the signal strength bar is displayed.

  When the bar is green, you are receiving the best possible signal.

- **MPEG Noise Filter (Off / Low / Medium / High / Auto)**: Reduces MPEG noise to provide improved picture quality.

- **HDMI Black Level (Low / Normal)**: Lets you select the black level on the screen to adjust the screen depth.

  Available only in HDMI mode (RGB signals).

- **Film Mode (Off / Auto1 / Auto2)**: Sets the TV so that it senses and then processes film signals from all sources automatically and adjusts the picture for optimum quality.

  Available in ATV, AV, Component (480i / 1080i) and HDMI (1080i).

  If the screen does not seem natural, change its option to **Off / Auto1 / Auto2** in **Film Mode**.

- **Auto Motion Plus**

  (Off / Clear / Standard / Smooth / Custom / Demo) for FH6030 series : Enhances motion in fast moving scenes.

  The info screen on your TV displays the resolution and frequency of the incoming video signal (60Hz). This frequency is not the frequency of the picture the TV is displaying when you have **Auto Motion Plus** on.

  If noise occurs on the screen, please set **Auto Motion Plus** to **Off**.
  If **Auto Motion Plus** is set to **Custom**, you can set **Blur Reduction**, **Judder Reduction**, **Reset** manually.

  Blur Reduction: Adjusts the blur reduction level of video from all sources.

  Judder Reduction: Adjusts the judder reduction level of video sources playing movies.

  Reset: Restores settings to default values.

- **LED Motion Plus (Off / On)**: Removes drag from fast scenes with a lot of movement to provide a clear picture.

  It will be deactivated when the picture mode is set to **Natural**.

  The screen may become slightly darker when you play **LED Motion Plus**.

Reset Picture (Yes / No)

Resets your current picture mode to its default settings.

❑ Changing the Preset Sound Modes

MENU → Sound → Sound Mode → ENTER

■ Sound Mode TOOLS

Use the ▲/▼ buttons to select an option, and then press ENTER.

- Standard: Selects the normal sound mode.
- Music: Emphasizes music over voices.
- Movie: Provides the best sound for movies.
- Clear Voice: Emphasizes voices over other sounds.
- Amplify: Increase the intensity of high-frequency sounds to allow a better listening experience for the hearing impaired.

If Speaker Select is set to External Speaker, Sound Mode is disabled.

❑ Sound Settings

MENU → Sound → Sound Effect → ENTER

■ Sound Effect

(standard sound mode only)

Use the ▲/▼ buttons to select an option, and then press ENTER.

- SRS TruSurround HD (Off / On) TOOLS

  This function provides a virtual 5.1 channel surround sound experience through a pair of speakers or headphones using HRTF (Head Related Transfer Function) technology.

- SRS TruDialog (Off / On)

  This function allows you to increase the intensity of a voice over background music or sound effects so that dialog can be heard more clearly.

- **Equalizer**

  Use **Equalizer** to customize sound setting for each speaker.

  Balance L / R: Adjusts the balance between the right and left speaker.

  100Hz / 300Hz / 1kHz / 3kHz / 10kHz (Bandwidth Adjustment): Adjusts the volume level of specific bandwidth frequencies.

  Reset: Resets the equalizer to its default settings.

  If **Speaker Select** is set to **External Speaker**, **Sound Effect** is disabled.

❑ Adjusting Sound Settings

■ Broadcast Audio Options

MENU → Sound → Broadcast Audio Options → ENTER

- **Preferred Language**

  (digital channels only)

  Use the ▲/▼ buttons to select a language, and then press **ENTER**.

  Digital-TV broadcasts can simultaneously transmit many audio tracks (for example, simultaneous translations of the program into foreign languages).

  You can only select a language from among the ones being broadcasted.

- **Multi-Track Sound (MTS)** TOOLS

  (analog channels only)

  Select an option using the ▲/▼ buttons, and then press **ENTER**↵.

  Mono: Choose for channels that are broadcasting in mono or if you are having difficulty receiving a stereo signal.

  Stereo: Choose for channels that are broadcasting in stereo.

  SAP: Choose to listen to the Separate Audio Program, which is usually a foreign-language translation.

  Depending on the program being broadcast, you can listen to **Mono**, **Stereo** or **SAP**.

  When you press the **TOOLS** button in digital channel, you can select a language from among the ones being broadcasted.

SPDIF Output

The SPDIF (Sony Philips Digital InterFace) outputs an uncompressed digital audio signal when you connect the digital audio jack on the back of the TV to a digital audio in jack on a receiver or home theater.

- **Audio Format**: You can select the Digital Audio output (SPDIF) format. The available Digital Audio output (SPDIF) format may differ depending on the input source.

  By connecting the TV to a receiver or home theater with **Dolby Digital** and 5.1ch speakers and selecting **Dolby Digital**, you can maximize your interactive 3D sound experience.

- **Audio Delay**: Lets you correct timing mismatches between the audio track and the video when you are watching the TV and listening to digital audio output from the TV through an external device such as an AV receiver. When you select **Audio Delay**, a slider appears. Use the ◄/► buttons to adjust the slider. Press **ENTER** when done (0ms ~ 250ms).

Speaker Settings

- **Speaker Select (External Speaker / TV Speaker)**

  If you are listening to the sound track of a broadcast or movie through an external receiver, you may hear a sound echo caused by the difference in decoding speed between the TV's speakers and the speakers attached to your audio receiver. If this occurs, set the TV to **External Speaker**.

  - When you set **Speaker Select** to **External Speaker**, the TV's speakers are turned off. You will hear sound through the external speakers only. When you set **Speaker Select** to **TV Speaker**, both the TV's speakers and the external speakers are on. You will hear sound through both.
  - When **Speaker Select** is set to **External Speaker**, the **VOLUME** and **MUTE** buttons will not operate and the sound settings will be limited.
  - If there is no video signal, both the TV's speakers and the external speakers will be mute.

- **Auto Volume (Off / Normal / Night)**

  Normal equalizes the volume level on each channel, so that when you change channels, the volume level is the same.

  Night equalizes and decrease the volume level on each channel, so each channel is quieter. **Night** is useful at night, when you may want to keep the volume low.

  To use the volume control on the source device connected to the TV, set **Auto Volume** to **Off** on the TV. Otherwise, a change to the volume control of the source device may not be applied.

■ Reset Sound (Yes / No)

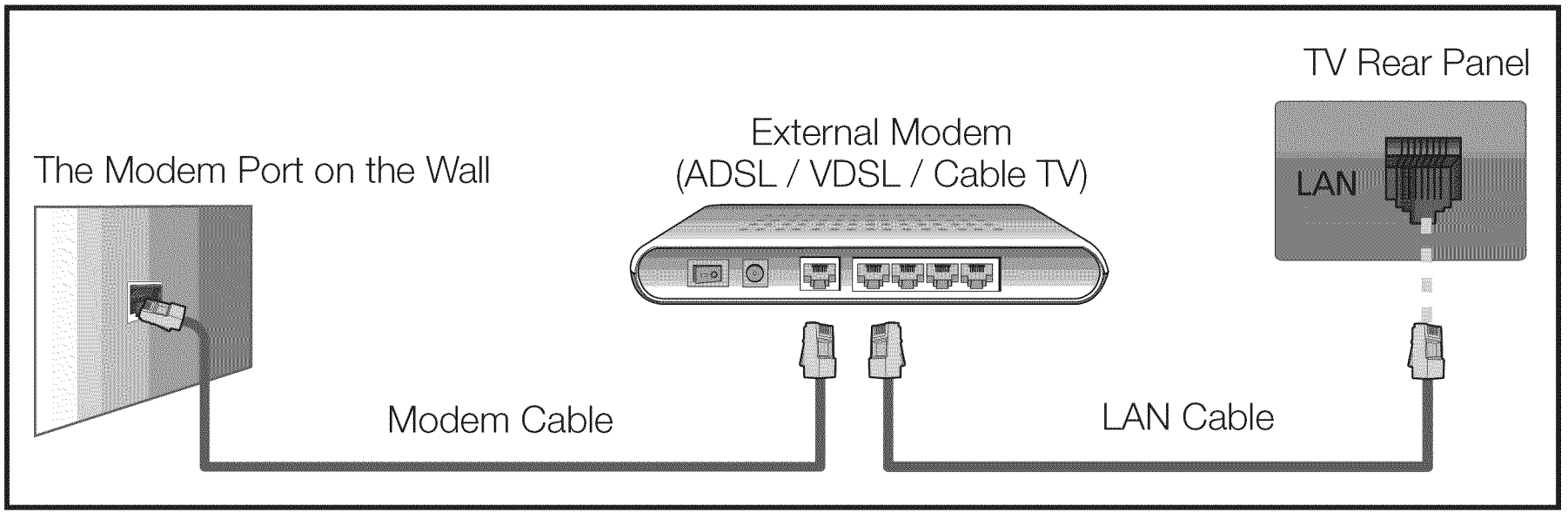
Reset all sound settings to the factory defaults. Select **Reset Sound**, press **ENTER**↵, select **Yes** on the pop-up, and then press **ENTER**↵ again.

❑ Connecting to the Network

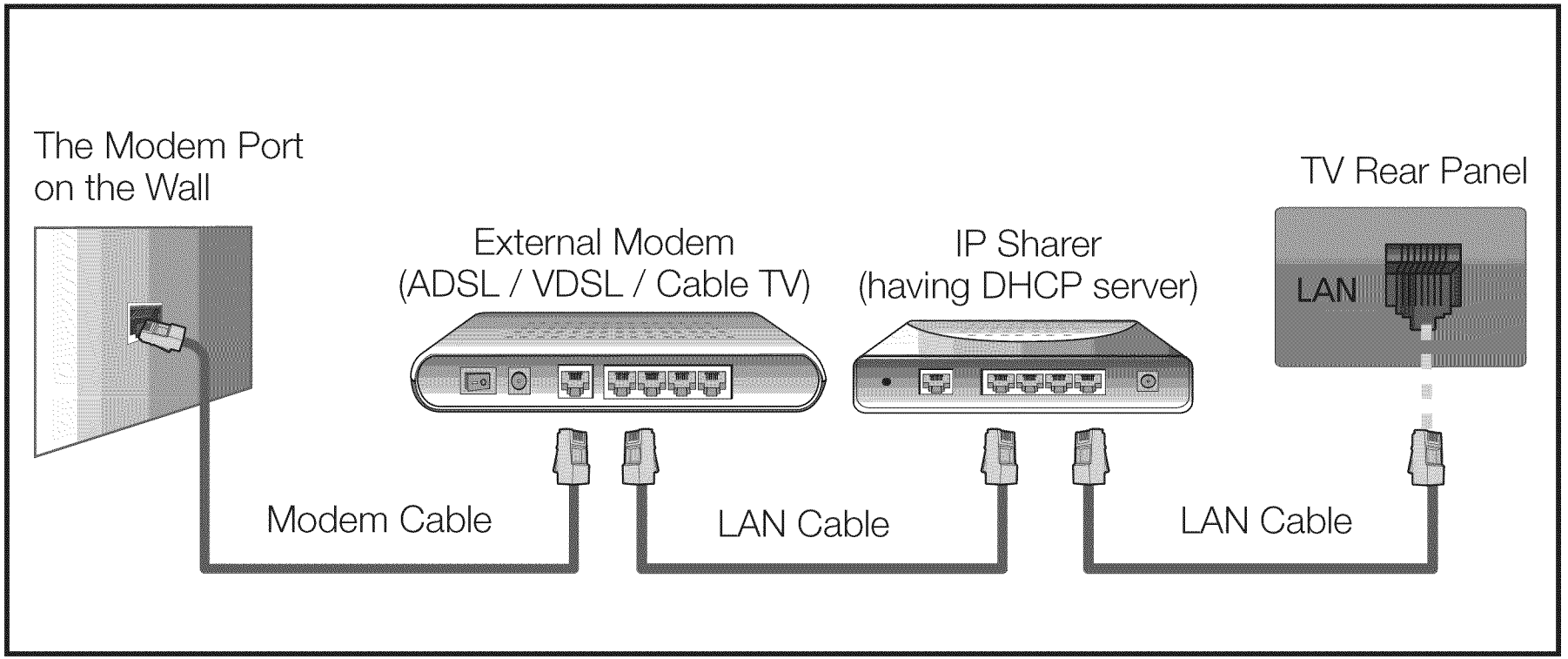
■ Wired Network Connection

There are three ways to attach your TV to your LAN using cable:

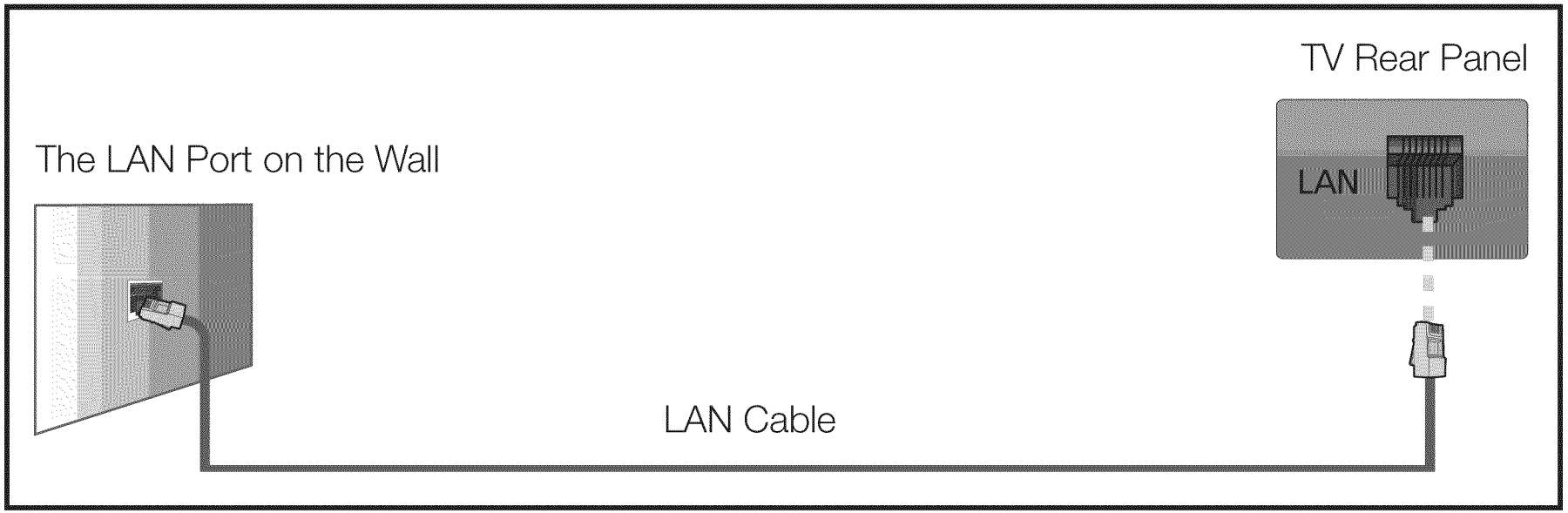
- You can attach your TV to your LAN by connecting the LAN port on the back of your TV to an external modem using a LAN cable. See the diagram below.



- You can attach your TV to your LAN by connecting the LAN port on the back of your TV to a IP Sharer (router) which is connected to an external modem. Use LAN cable for the connection. See the diagram below.



- Depending on how your network is configured, you may be able to attach your TV to your LAN by connecting the LAN port on the back of your TV directly to a network wall outlet using a LAN cable. See the diagram below. Note that the wall outlet is attached to a modem or router elsewhere in your house.



- If your network requires a Dynamic IP address, you should use an ADSL modem or router that supports the Dynamic Host Configuration Protocol (DHCP). Modems and routers that support DHCP automatically provide the IP address, subnet mask, gateway, and DNS values your TV needs to access the Internet so you do not have to enter them manually. Most home networks use a Dynamic IP address.

  Some networks require a Static IP address. If your network requires a Static IP address, you must enter the IP address, subnet mask, gateway, and DNS values manually on your TV's Cable Setup Screen when you set up the network connection. To get the IP address, subnet mask, gateway, and DNS values, contact your Internet Service Provider (ISP). If you have a Windows computer, you can also get these values through your computer.

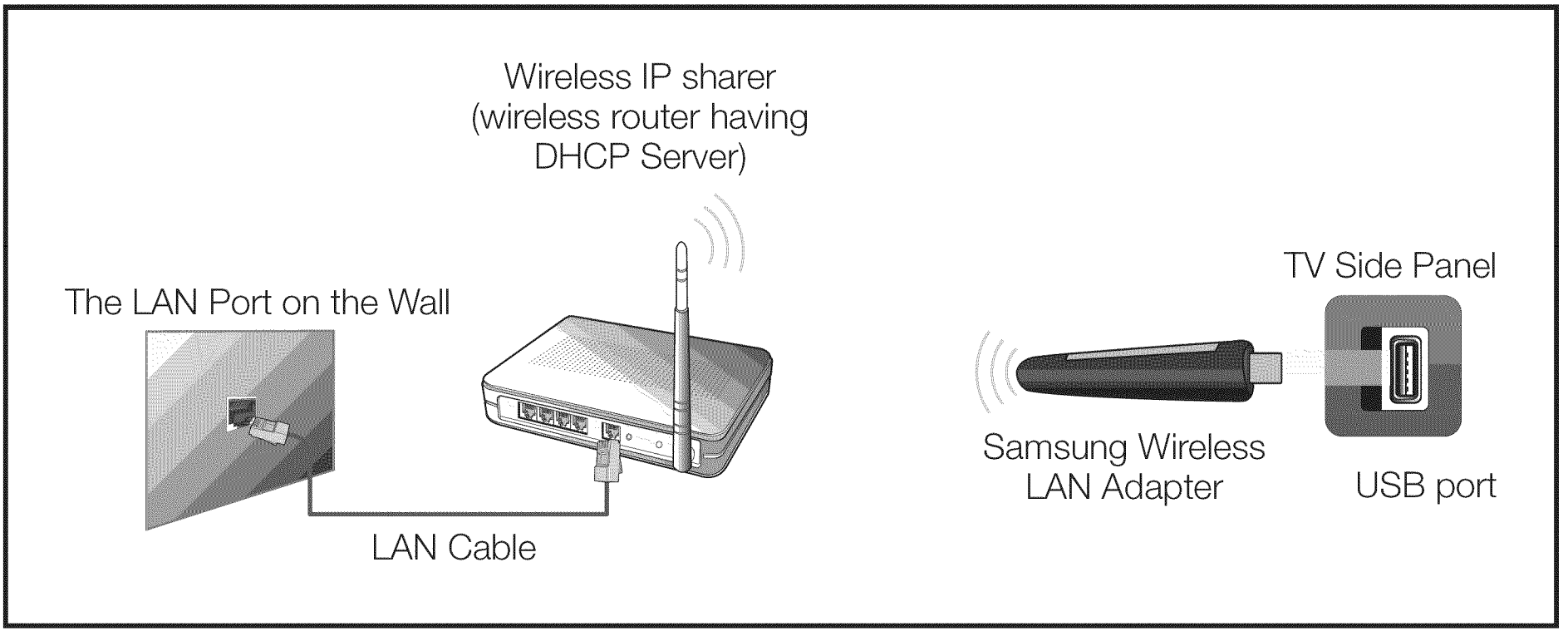
  You can use ADSL modems that support DHCP if your network requires a Static IP address. ADSL modems that support DHCP also let you use Static IP addresses.

  It is not supported when the network speed is below or equal to 10Mbps.

  Use Cat 6 (*STP Type) cable for the connection. (*Shielded Twist Pair)

■ Wireless Network Connection

To connect your TV to your wireless network, you need a wireless router or modem and a Samsung Wireless LAN Adapter (WIS09ABGNX, WIS12ABGNX), which you connect to your TV's back or side panel USB port. See the illustration below.



Samsung's Wireless LAN adapter is sold separately and is offered by selected retailers, Ecommerce sites, and Samsungparts.com. Samsung's Wireless LAN adapter supports the IEEE 802.11a/b/g and n communication protocols. Samsung recommends using IEEE 802.11n. When you play video over a network connection, the video may not be played smoothly.

NOTE

- You must use the "Samsung Wireless LAN Adapter" (WIS09ABGNX, WIS12ABGNX) to use a wireless network.
- Samsung Wireless LAN Adapter and The USB extension Cable are sold separately and are offered by selected retailers, Ecommerce sites and Samsungparts.com.
- To use a wireless network, your TV must be connected to a wireless IP sharer (either a router or a modem). If the wireless IP sharer supports DHCP, your TV can use a DHCP or static IP address to connect to the wireless network.

- Select a channel for the wireless IP sharer that is not currently being used. If the channel set for the wireless IP sharer is currently being used by another device nearby, this will result in interference and communication failure.
- Your TV supports the following wireless security systems only:
  - Authentication Mode: WEP, WPAPSK, WPA2PSK
  - Encryption Type: WEP, AES
- If you select the HIGH PURE THROUGHPUT (Greenfield) 802.11n mode and the Encryption type is set to WEP or TKIP for your wireless router, Samsung TVs will not support a connection in compliance with new Wi-Fi certification specifications.
- If your wireless router supports WPS (Wi-Fi Protected Setup), you can connect to the network via PBC (Push Button Configuration) or PIN (Personal Identification Number). WPS will automatically configure the SSID and WPA key in either mode.

- If your router, modem, or device is not certified, it may not connect to the TV via the “Samsung Wireless LAN Adapter”.
- Ensure the TV is turned off before you connect the Samsung Wireless LAN Adapter.
- Connection Methods: You can setup the wireless network connection like below.
  - Auto Setup (Using the Auto Network Search function)
  - Manual Setup
  - WPS (PBC)
- The TV may not recognize the Samsung Wireless LAN Adapter if it is connected to the TV using a USB hub or USB extension cable other than the cable supplied.

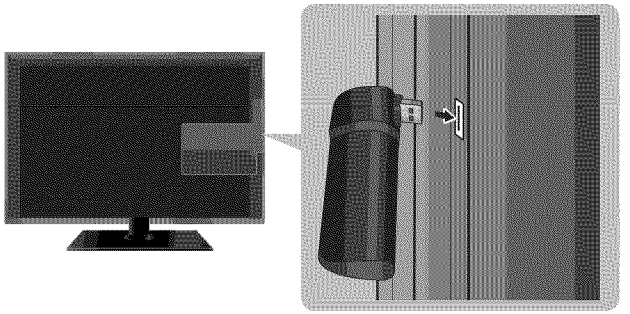
Notice

The picture may appear corrupted or have static for some channels when the TV is connected to the Samsung Wireless LAN Adapter. In such a case, establish a connection using one of the following methods or connect the Samsung Wireless LAN Adapter using a USB cable in a place that is not affected by radio interference.

Method 1

Connect using the USB right angle adapter. To connect the Samsung Wireless LAN Adapter using the USB right angle adapter, follow these steps:

1. Connect the USB right angle adapter to the Samsung Wireless LAN Adapter.
2. Connect the other end of the right angle adapter to the USB port.

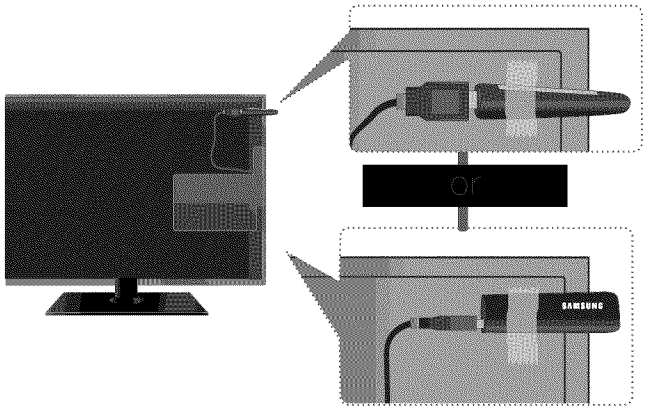


* The position of port may differ depending on the model.

Method 2

Connect via an extension cable

To connect the Samsung Wireless LAN Adapter using the extension cable, follow these steps:



* The position of port may differ depending on the model.

1. Connect the extension cable to the USB port.
2. Connect the extension cable and Samsung Wireless LAN Adapter.
3. Attach the Samsung Wireless LAN Adapter to the back of the TV near the top, using double-sided adhesive tape.

   The Samsung Wireless LAN Adapter should be installed in an interference-free area in order to avoid interference between the adapter and tuner.

Network Settings

MENU → Network → Network Settings → ENTER

Set the network connection to use AllShare™ and perform software upgrade.

- For detailed settings for wired network, refer to the “Setting the Wired Network”, and for detailed settings for wireless network, refer to the “ Setting the Wireless Network” in this manual.
- If you set the network, you can share the contents and update the functions through the **AllShare Play**. It only supports **AllShare Play** and software upgrade. Other Internet functions are not supported.

Network Status

MENU → Network → Network Status → ENTER

You can check the current network and Internet status.

The check list for wired network connection failure

When wired network connection failed, try to apply the following information to each issue.

Issues	Solutions and Explanations
No network cable found.	• Check that your network cable is plugged in. • If it is connected, make sure that the router is turned on; if it is on, try turning it off and on again.
IP auto setting failed.	Try the following to set your IP address automatically or set your IP address manually by selecting **IP Settings**. • Ensure DHCP server is enabled on router and unplug and re-plug-in the router. • Contact your Internet Service Provider for more information.

Issues	Solutions and Explanations
Unable to connect to the network.	• Check if your IP address is set correctly in **IP Settings**. • Contact your Internet Service Provider for more information.
Connected to your local network, but cannot connect to the Internet.	• Check your Internet LAN cable is connected correctly to LAN port of router. • Check the DNS settings in **IP Settings**. • If the problem persists, contact your Internet Service Provider to access the Internet.
Network setup complete, but cannot connect to the Internet.	• Confirm that your router is connected to the Internet. • If the problem persists, contact your Internet Service Provider to access the Internet.

The check list for wireless network connection failure

When wireless network connection failed, try to apply the following information to each issue.

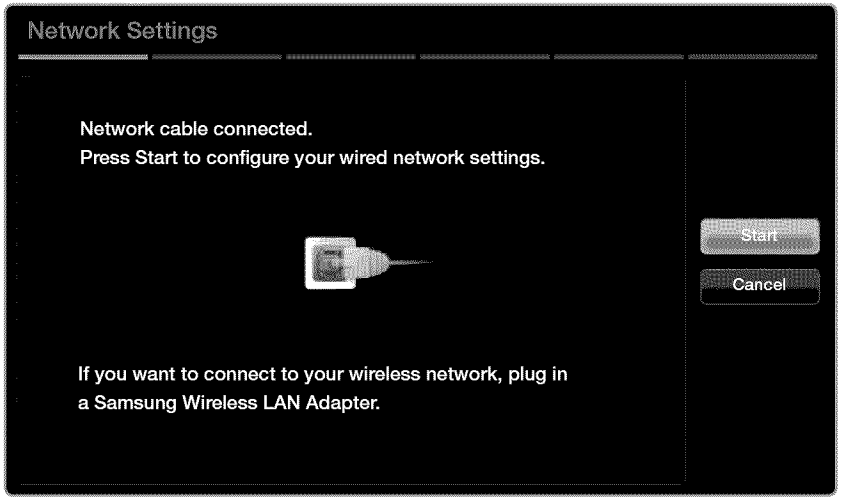
Issues	Solutions and Explanations
Wireless network connection failed.	• No wireless router selected. Go to **Network Settings** to select your router.
Unable to connect to wireless router.	• Check that the router is turned on, and if it is on, try turning it off and on again. • Check if you need to enter a security key to use the router.
IP auto setting failed.	• Try the following to set your IP address automatically or set your IP address manually by selecting **IP Settings**. • Ensure DHCP server is enabled on router and unplug and re-plug-in the router. • Check if you need to enter a security key to use the router. • Contact your Internet Service Provider for more information.

Issues	Solutions and Explanations
Unable to connect to the network.	• Check if your IP address is set correctly in **IP Settings**. • Check if you need to enter a security key to use the router. • Contact your Internet Service Provider for more information.
Connected to your local network, but cannot connect to the Internet.	• Check your Internet LAN cable is connected correctly to LAN port of router. • Check the DNS settings in **IP Settings**. • If the problem persists, contact your Internet Service Provider to access the Internet.
Network setup complete, but cannot connect to the Internet.	• Confirm that your router is connected to the Internet. • If the problem persists, contact your Internet Service Provider to access the Internet.

❑ Setting the Wired Network

■ Wired Network Setup (Auto)

Use the Automatic Network Setup when connecting your TV to a network that supports DHCP. To set up your TV's cable network connection automatically, follow these steps:

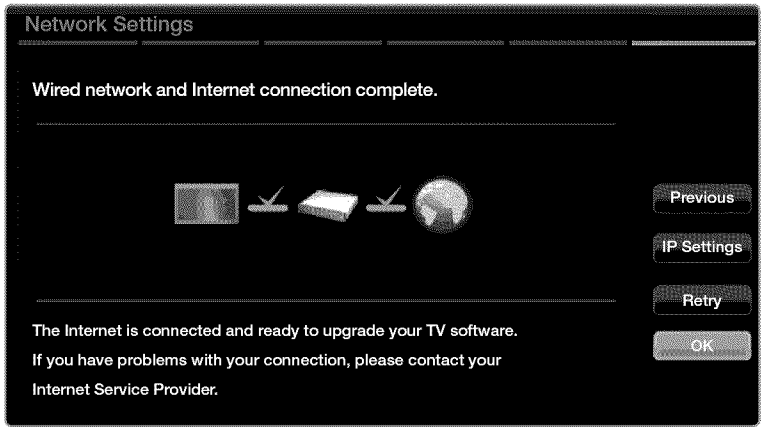

Network Settings
Network cable connected.
Press Start to configure your wired network settings.
Start
Cancel
If you want to connect to your wireless network, plug in a Samsung Wireless LAN Adapter.

When connecting LAN cable, the screen pop-up appears directly to set wired network.

How to set up automatically

1. Go to the Network Settings screen. (**MENU** → Network → Network Settings → **ENTER**)
2. Select Start, and then press **ENTER**.

3. The network connection screen appears and verifies the network connection. When the connection has been verified, the "**The Internet is connected and ready to upgrade your TV software...**" message appears.


Network Settings
Wired network and Internet connection complete.
Previous
IP Settings
Retry
OK
The Internet is connected and ready to upgrade your TV software.
If you have problems with your connection, please contact your
Internet Service Provider.

If the connection process fails, check the LAN port connection.

If the automatic process cannot find the network connection values or if you want to set the connection manually, go to the next section, Manual Network Setup.

■ Wired Network Setup (Manual)

Use the Manual Network Setup when connecting your TV to a network that requires a Static IP address.

Getting the Network Connection Values

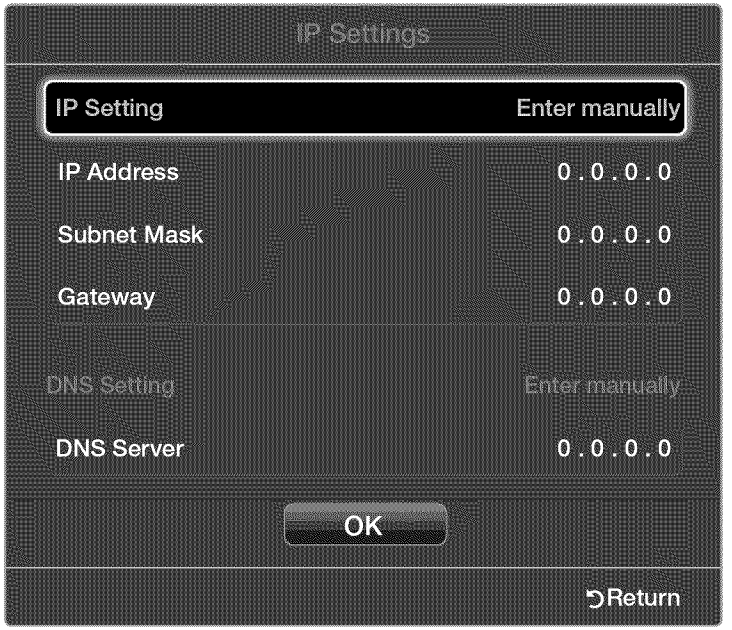
To view the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

1. Go to the **Network Settings** screen. (**MENU** → **Network** → **Network Settings** → **ENTER**)
2. Select **Start**, and then press **ENTER**. The network connection screen appears and the verification process starts.
3. Press **ENTER**. The verification process stops. Select **IP Settings** on network connection screen. The **IP Settings** screen appears.



4. In the top entry field, press **ENTER**, and then set **IP Setting** to **Enter manually**.

5. Press the ▼ button to go to the IP Address entry field, and then press **ENTER**↵.

6. Enter the first portion of the IP Address (for example, 105) into the first entry field using the number keys. Press the ► button to go to the next field.

7. Enter the next portion of the IP Address. Press the ► button to go to the next field.

8. Repeat the entry process for each field in the IP Address.

   If you make a mistake when entering a number, re-enter the number to correct it. You can also press the ▲/▼ buttons to change the number one unit at a time.

9. When done entering **IP Address**, press **ENTER**↵.
10. Press the ▼ button to go to the Subnet Mask fields, and then press **ENTER**↵.
11. Repeat the same entry process for **Subnet Mask**, **Gateway**, and **DNS Server**.
12. When done, select **OK** at the bottom of the page, and then press **ENTER**↵. The network connection screen appears and the verification process starts. When the connection has been verified, the "**The Internet is connected and ready to upgrade your TV software...**" message appears.

❑ Setting the Wireless Network

■ Wireless Network Setup (Auto)

Most wireless networks have an optional security system that requires devices that access the network to transmit an encrypted security code called an Access or Security Key. The Security Key is based on a Pass Phrase, typically a word or a series of letters and numbers of a specified length you were asked to enter when you set up wireless security for your wireless network. If you use this method of setting up the network connection, and have a Security Key for your wireless network, you will have to enter the Pass Phrase during the automatic or manual setup process.

When connecting Samsung Wireless LAN Adapter, the screen pop-up appears directly to set wireless network.

How to set up automatically

1. Go to the **Network Settings** screen. (**MENU** → **Network** → **Network Settings** → **ENTER**)
2. Select **Start**, and then press **ENTER**.
3. The Network function searches for available wireless networks. When done, it displays a list of the available networks.

Network Settings
Samsung Wireless LAN Adapter connected.
Press Start to configure your wireless network settings.
Start
Cancel
If you want to connect to your wired network, plug in a network cable.

4. In the list of networks, press the ▲ or ▼ button to select a network, and then press the **ENTER** ↵ button.

   If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct network **Name (SSID)** and Security key to establish the connection.

5. If the Enter security key screen appears, go to step 6. If you select an wireless router that does not have wireless security, go to step 8.

6. Enter the security key (Security key or PIN).

   When you enter the security key (Security or PIN), use ▲/▼/◀/▶ buttons to select number/characters. Press **ENTER** ↵ to enter the characters.

- You can also enter numbers by pressing the number buttons.
- You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.

7. When done, use the ► button to move the cursor to **Next**, and then press **ENTER**↵.
8. The network connection screen appears and the verification process starts. When the connection has been verified, the "**The Internet is connected and ready to upgrade your TV software...**" message appears.

- If the network does not accept the Security key (Security or PIN), select **Retry** or select **IP Settings** to enter the settings manually.
- If you want to set up the connection manually, select **IP Settings**. Then, go to the next section, "How to set up manually".

■ Wireless Network Setup (Manual)

Use Manual Network Setup when connecting your TV to a network that requires a Static IP address or if the automatic connection process has failed.

Getting the Network Connection Values

To view the Network connection values on most Windows computers, follow these steps:

1. Right click the Network icon on the bottom right of the screen.
2. In the pop-up menu that appears, click Status.
3. On the dialog that appears, click the Support tab.
4. On the Support Tab, click the Details button. The Network connection values are displayed.

How to set up manually

To set up your TV's cable network connection manually, follow these steps:

1. Go to the **Network Settings** screen. (**MENU** → **Network** → **Network Settings** → **ENTER**)
2. Select **Start**, and then press **ENTER**.
3. The Network function searches for available wireless networks. When done, it displays a list of the available networks.
4. In the list of networks, press the ▲ or ▼ button to select a network, and then press the **ENTER** button twice.

   If the wireless router is set to Hidden (Invisible), you have to select **Add Network** and enter the correct network **Name (SSID)** and Security key to establish the connection.

5. If the Enter security key screen appears, go to step 6. If you selected an AP or wireless router that does not have wireless security, go to step 8.

6. Enter the security key (Security key or PIN).

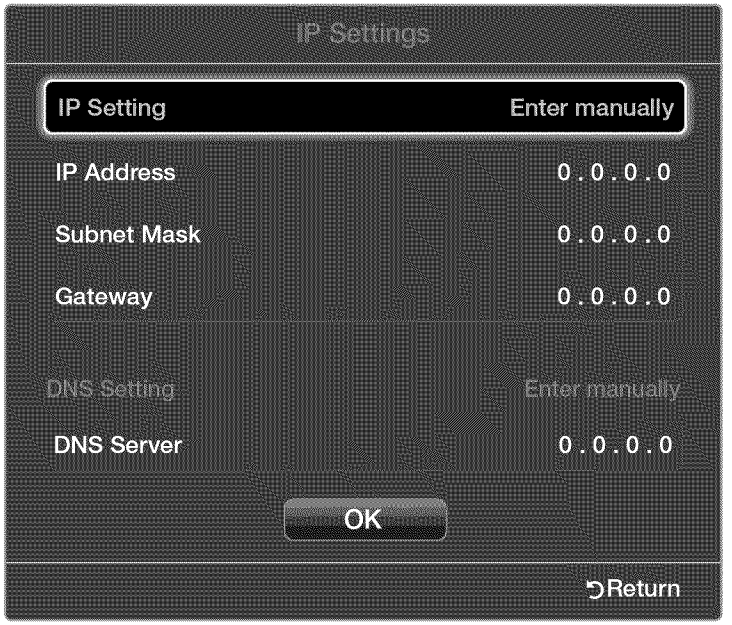
   When you enter the security key (Security key or PIN), use ▲/▼/◀/▶ buttons to select number/characters. Press **ENTER** ↵ to enter the characters.

   You can also enter numbers by pressing the number buttons.

   You should be able to find the Pass Phrase on one of the set up screens you used to set up your router or modem.

7. When done, use the ▶ button to move the cursor to **Next**, and then press the **ENTER** ↵ button.

8. The network connection screen appears and the verification process starts. Press **ENTER** to cancel. Select **IP Settings** on network connection screen. The **IP Settings** screen appears.



9. In the top entry field, press **ENTER**, and then set **IP Setting** to **Enter manually**.
10. Press the ▼ button to go to the **IP Address** entry field, and then press **ENTER**.
11. Enter the first portion of the **IP Address** (for example, 105) into the first entry field using the number keys. Press the ► button to go to the next field.
12. Enter the next portion of the **IP Address**. Press the ► button to go to the next field.

13. Repeat the entry process for each field in the **IP Address**.

    If you make a mistake when entering a number, re-enter the number to correct it. You can also press the ▲/▼ buttons to change the number one unit at a time.

14. When done entering the **IP Address**, press **ENTER**↵.

15. Press the ▼ button to go to the **Subnet Mask** fields, and then press **ENTER**↵.

16. Repeat the same entry process for **Subnet Mask**, **Gateway**, and **DNS Server**.

17. When done, select **OK** at the bottom of the page, and then press **ENTER**↵. The network connection screen appears and the verification process starts. When the connection has been verified, the "**The Internet is connected and ready to upgrade your TV software...**" message appears.

■ Wireless Network Setup (WPS(PBC))

How to set up using WPS(PBC)

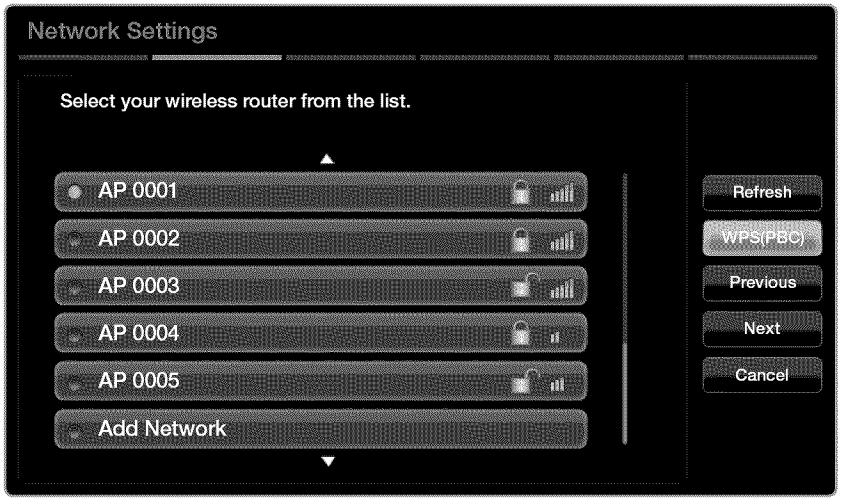
If your router has a PBC (WPS) button, follow these steps:

1. Go to the **Network Settings** screen. (**MENU** → **Network** → **Network Settings** → **ENTER**)
2. Select **Start**, and then press **ENTER**.
3. The Network function searches for available wireless networks. When done, it displays a list of the available networks.

4. Select the WPS(PBC).

5. Press the WPS(PBC) button on your router within 2 minutes. Your TV automatically acquires all the network setting values it needs and connects to your network.

6. The network connection screen appears, and network set up is done.



If Your TV Fails to Connect to the Internet

Your TV may not be able to connect to the Internet because your ISP has permanently registered the MAC address (a unique identifying number) of your PC or modem, which it then authenticates each time you connect to the Internet as a way of preventing unauthorized access. As your TV has a different MAC address, your ISP can not authenticate its MAC address, and your TV can not connect.

To resolve this problem, ask your ISP about the procedures required to connect devices other than a PC (such as your TV) to the Internet.

If your Internet service provider requires an ID or password to connect to the Internet, your TV may not be able to connect to the Internet. If this is the case, you must enter your ID or password when connecting to the Internet.

The internet connection may fail because of a firewall problem. If this is the case, contact your Internet service provider.

If you cannot connect to the Internet even after you have followed the procedures of your Internet service provider, please contact Samsung Electronics at 1-800-SAMSUNG.

❑ Managing the Network Connected Devices

■ AllShare Settings

MENU → Network → AllShare Settings → ENTER

Set whether to allow a network connected device like a smartphone or tablet to share content or control TV using an application downloaded on your mobile device. For details on set up options, refer to the "Using the DLNA Functions".

Device Name

MENU → Network → Device Name → ENTER

Change the TV's name by keying in a name manually.

A keyboard appears on the screen and you can key in a name for your TV manually using your remote control. For example, if you want to change the name to Samsung TV, press each character using the ▲/▼/◀/▶ buttons, and then select Done.

❑ Setting the Setup

■ Setup

MENU → System → Setup → ENTER

Configure the channels and the time when setting up the TV for the first time or when resetting the unit.

For the detailed information about setting Setup, refer to “Setup (Initial Setup)” in User Manual.

❑ Setting the Time

■ Time

MENU → System → Time → ENTER

The current time will appear every time you press the **INFO** button.

- **Clock**: Set the clock to use the various timer features of the TV.

  If you disconnect the power cord, you have to set the clock again.

  Clock Mode: Set the current time manually or automatically.

  - **Auto**: The TV sets the current time automatically using the time from a digital channel.

    You must have cable or an antenna connected to the TV to set the time automatically.

- **Manual**: Set the current time manually.

  Depending on the broadcast station and signal, the auto time set up may not be correct. In this case, set the time manually.

Clock Set: Set the **Date** and **Time**.

Select **Clock Set**. Select **Date** or **Time**, and then press **ENTER**↵. Use the number buttons or the ▲/▼ buttons to enter numbers. Use the ◄/► buttons to move from one entry field to the next. Press **ENTER**↵ when done.

Available only when **Clock Mode** is set to **Manual**.

Time Zone: Select your time zone.

This function is only available when the Clock Mode is set to Auto.

DST (Off / On): Switches the DST (Daylight Saving Time) function on or off.

This function is only available when the Clock Mode is set to Auto.

❑ Using the Sleep Timer

MENU → System → Time → Sleep Timer → ENTER

- Sleep Timer TOOLS: Automatically shuts off the TV after a preset period of time. (30, 60, 90, 120, 150 and 180 minutes).

  Use the ▲/▼ buttons to select a period of time, and then press ENTER. To cancel the Sleep Timer, select Off.

❑ Setting the On/Off Timer

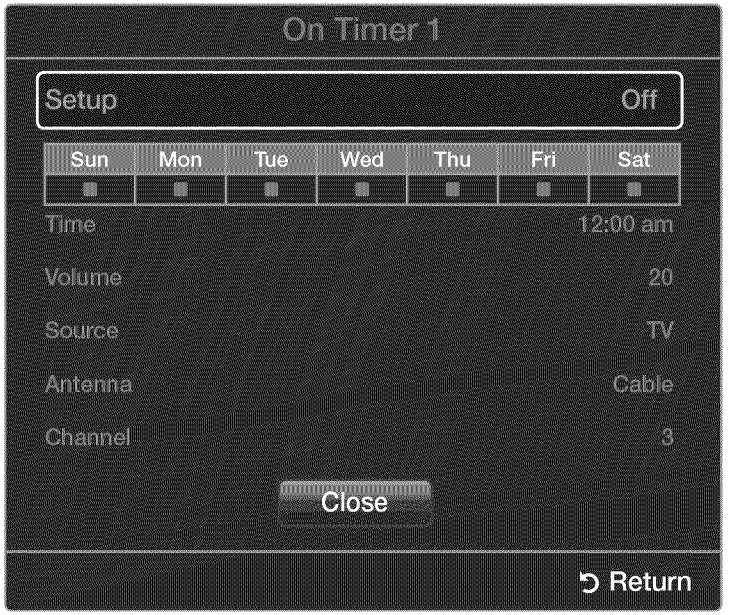
MENU → System → Time → On Timer <or> Off Timer → ENTER

Set On Timer so that your TV turns on automatically at a time and on a day of your choosing.

- On Timer: You can set up three separate On Timer configurations. (On Timer 1, On Timer 2, On Timer 3)

  You must set the clock before you can use On Timer.

  Setup: Select Off, Once, Everyday, Mon~Fri, Mon~Sat, Sat~Sun or Manual. If you select Manual, you can choose the days you want On Timer to turn on your TV.



The ✓ mark indicates days you've selected.

Time: Set the hour, minute, am/pm. Use the number buttons or the ▲/▼ buttons to enter numbers. Use the ◄/► buttons to change entry fields.

Volume: Set the desired volume level. Use the ◄/► buttons to change the volume level.

Source: To select the source of the content that will play when the TV turns on. You can:

- Select **TV** and have the TV display a specific air or cable channel.
- Select **USB** and have the TV play back photo or audio files from a USB device.
- Select a source on your TV (**HDMI1/DVI, HDMI2, AV, Component**) that you have connected a set-top box to, and have the TV display a channel from the set-top box.

The USB device must be connected to your TV before you can select **USB**.

If you select a source other than **TV** or **USB**, you must:

- Have a cable or satellite set-top box attached to that source
- Set the set-top box to the channel you want to watch when the TV goes on
- Leave the set-top box turned on.

When you select a source other than **TV** or **USB**, the **Antenna** and **Channel** options will disappear.

Antenna (when the **Source** is set to **TV**): Select **Air** or **Cable**.

Channel (when the **Source** is set to **TV**): Select the desired channel.

Music / Photo (when the **Source** is set to **USB**): Select a folder in the USB device containing the music or photo files you want to play when the TV turns on automatically.